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REMARKS

This amendment is responsive to the Official Action dated August 11, 2003.

Claims 1 - 41 were pending in the application.

Claims 3-6, 9, 10, 18, 25, 26, and 30-41 were indicated as being withdrawn from consideration.

Claims 16, 17, 19-21, 23, 24, and 27-29 were rejected in light of prior art.

Claims 1-15 were indicated as being allowable if rewritten to overcome the Section 112 objections. Claim 22 was indicated as being allowable if rewritten to include all of the limitations of the rejected base claims.

By way of this amendment, the Applicant has amended claims 1, 2, 3, 5, 12, 13 and 22, and canceled claims 16-21, and 23-29.

Claims 1-15, 22 and 30-41 remain pending in the Application.

CLAIM OBJECTIONS:

Claims 1-2, and 16 were objected to because of minor language informalities. As suggested by the Examiner, the term "first" has been added to claim 1 to distinguish the first and second DBR's. Claim 16 has been canceled.

With regard to claim 2, "the thickness of said first layers" the Applicant has made amendments to claims 2, 3 and 5 to clarify thickness as "the optical thickness".

Also with regard to claim 2, "odd integer multiple" the Applicant has amended claim 2 to further recite "said odd integer multiple being greater than 1". This should clarify the misdescriptive issues with claim 1.

Accordingly, the cited objections are now believed to be traversed. Withdrawal of the objections is respectfully solicited.

CLAIM REJECTIONS:

Claims 16-17, 19-21, 23-24 and 27 were rejected under 35 USC §103 as being unpatentable over Lim et al in view of Mawst et al.

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In addition, Claims 28-29 were rejected under 35 USC §103 as being unpatentable over Lim et al in view of Mawst, and further in view of Ramdani et al.

Claims 16-21 and 23-29 have been canceled.

Withdrawal of the rejections is respectfully solicited.

ALLOWABLE SUBJECT MATTER:

Claims 1-15 were indicated as being allowable if rewritten or amended to overcome the objections under 35 USC §112.

Claims 1-15 have been corrected as suggested by the Examiner and are now believed to be in condition for allowance.

It is noted that claims 3-6, 9 and 10 were indicated above to have been withdrawn from consideration as being drawn to a non-elected species. This seems inconsistent with the indication of allowable subject matter as found in claim 1 and in general with the indication of allowability of claims 1-15. In light of the indication of allowability of claims 1-15, it is presumed that claims 3-6, 9 and 10 were considered and deemed allowable.

Accordingly, claims 1-15 are considered to be pending in the application and in condition for allowance.

Claim 22 was also indicated as being allowable if rewritten to include all of the limitations of the rejected base claims. Claim 22 has now been amended to include the subject matter of claims 16, 20, and 21.

Accordingly, claim 22 is now believed to be in condition for allowance.

PREVIOUS ELECTION and WITHDRAWAL OF CLAIMS 30-41:

Applicant previously made an election of the embodiment illustrated in Fig. 8 and made an indication that originally filed claims 1, 2, and 7-29 read on the elected embodiment. Within the previous election, Applicant also added new claims 30-41 which were indicated as being generic to all embodiments. Aside from indicating that claims 30-41 were generic to all embodiments, Applicant did not make a clear statement that claims 30-41 also read on the elected species shown in Fig. 8. However, claims 30-41 do in fact read on the elected embodiment of Fig. 8.

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A comparison of claims 1 and 30 is found below. Previously added claim 30 incorporates all of the elements of allowed claim 1 and further includes additional patentable elements identified in italics below.

<p>Claim 1</p> <p>An optoelectronic device, comprising:</p> <p style="padding-left: 40px;">an active region adjacent a first distributed bragg reflector (DBR) comprising</p> <p style="padding-left: 40px;">a plurality of mirror periods wherein said mirror periods comprise</p> <p style="padding-left: 40px;">a first layer formed from a first material having a first thermal conductivity and</p> <p style="padding-left: 40px;">a second layer formed from a second material having a second thermal conductivity that is greater than said first thermal conductivity and,</p>	<p>Claim 30</p> <p>An optoelectronic device comprising:</p> <p style="padding-left: 40px;">an active region; and</p> <p style="padding-left: 40px;">a distributed bragg reflector (DBR) adjacent said active region, said DBR comprising</p> <p style="padding-left: 40px;">a plurality of mirror periods wherein said mirror periods comprise</p> <p style="padding-left: 40px;">a first layer formed from a first material having a first thermal conductivity and</p> <p style="padding-left: 40px;">a second layer formed from a second material having a second thermal conductivity,</p> <p style="padding-left: 80px;">said second thermal conductivity being greater than said first thermal conductivity,</p> <p style="padding-left: 80px;"><i>said plurality of mirror periods including a first mirror period adjacent said active region,</i></p> <p style="padding-left: 80px;"><i>said second layer of said first mirror period being adjacent said active region.</i></p>
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<p>wherein the optical thickness of said first layer does not equal the optical thickness of said second layer for at least a portion of the plurality of mirror periods.</p>	<p>said second layer of said first mirror period having an optical thickness greater than an optical thickness of said first layer of said first mirror period,</p> <p><i>each of said plurality of mirror periods having an optical thickness equal to a multiple of $\frac{1}{2}$ wavelength of light emitted by said optoelectronic device.</i></p>
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The italicized portions of the claims still read on the elected embodiment Fig. 8 in that Fig. 8 includes a first mirror period adjacent the active region and a second mirror layer of the first mirror period adjacent the active region, and still further follows the $\frac{1}{2}$ wavelength rule in that the $\frac{3}{4}$ - $\frac{1}{4}$ alternating thicknesses are a multiple of $\frac{1}{2}$ wavelength.

In any even, since claim 30 includes all of the allowable limitations of claim 1, claims 30-41 should not have been withdrawn and should now be considered as allowable subject matter.

Reconsideration of claims 30-41 is respectfully solicited in light of the allowability of claims 1-15.

Accordingly, claims 1-15, 22 and 30-41 are believed to be in condition for allowance and the application ready for issue.

Corresponding action is respectfully solicited.

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or credit any overpayment to our account #02-0900.

Respectfully submitted,



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